# Madhav Institute of Technology & Science, Gwalior Electrical Engineering Department

(NBA Accredited)

## **NEWSLETTER**



Department of Electrical Engineering is one of the oldest departments established in 1957 at MITS campus The department is dedicated to the teaching and research activities in the areas of Electrical, Electronics, Instrumentation & Control Engineering. The department educates the students to take up challenging jobs in a wide range of industries and engage themselves in research and development activities for the good of society. The syllabi of the courses are continuously updated and the laboratories modernized to reflect the rapid changes in technology. It also offers high quality research in the (ME and Ph.D.) Programs. Courses offered by the department cater to learning needs from basics to the advanced level. Department offers variety of discipline electives and covers most of the modern technologies. It has state of the art laboratories to provide hands on experiences and support research activities.

#### Vision

# "To prepare professionally competent and ethical Electrical Engineers for global and social technological demands"

#### Mission

- Impart state-of- the-art education to produce globally competent electrical engineers.
- Engage in cutting-edge research & sustainable technologies for overall development of students and society in an ethical manner.
- Identify latest areas of specialization based on an informed perception of regional, national and global needs.
- Undertake collaborative projects which offer opportunities for long term interaction with academia & industry.

## **Programme Educational Objectives (PEOs)**

- PEO-I Graduates of the programme will have successful technical and professional careers.
- PEO-II Graduates of the programme will continue to learn and adapt in a world of constantly evolving technology.
- PEO-III- Graduates of the programme will be able to apply, analyze, design and create products and solutions for real life Electrical Engineering problems.
- PEO-IV- Graduates of the programme will be able to manage projects catering to current societal and industrial needs in an ethical manner working as members/leaders of multidisciplinary teams.

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## **FACULTY**

## Talk delivered outside the Institute

- Dr. Manjaree Pandit Chaired a Session in 2nd IEEE International Conference on Smart Technologies for Power, Energy & Control, (STPEC-2021), Organized by: Chouksey Engineering College, Bilaspur (Chhattisgarh), 19th -22nd December 2021.
- Dr A. K. Wadhwani delivered an online Expert talk on Determination of span of Covid-19, Duration of Maximum Severity and change of Mutation using Astrological Aspects and Fuzzy Rules, Organized by, IETE, Bhopal Centre, Bhopal (India) on 10.10.2021.

## FACULTY

## TRAINING PROGRAMME/FDP ATTENDED

 Vishal Chaudhary attended AICTE Training and Learning (ATAL) Academy Online FDP on "Design and Recent Development in Renewable Energy Based Microgrid System" from 25th to 29th October 2021 organized by Electrical Engineering Department, National Institute of Technology, Mizoram.

## **FACULTY & STAFF**

#### WORKSHOP/WEBINAR ATTENDED

- Yogeshwar Dayal Jaital attended the Webinar 30 Days on "Renewable Energy System Master Class" from 17th Oct., 2021 to 16th Nov., 2021 organized by Pantech E-Learning Pvt Ltd, Chennai, Tamilnadu 600017
- Shishir Dixit, successfully participated in University Distinguished Lecture titled "Science, Technology and Innovation Policy 2020: A Transformative S&T Agenda" delivered by Prof. Sandeep Verma, Secretary of Science and Engineering Research Board (SERB), DST, Government of India organized by SRM University-AP, held on October 30 2021

# ACTIVITIES ORGANIZED (WORKSHOP/CONFERENCE/FDP/STC) at INSTITUTE LEVEL

- Holistic Health Club MITS in collaboration with Rotaract Club of Gwalior Regal and Electrical Engineering Department organized a CLEANLINESS PROGRAM AND CAMPAIGN on 2<sup>nd</sup> October 2021.
- Alumni Interaction Cell of Electrical Engineering Department organized Alumni e-Conclave, on 10<sup>th</sup> October 2021.
- Electrical Engineering Department organized Online IPR Awareness program on 17<sup>th</sup> December 2021.
- Alumni Interaction Cell of Electrical Engineering Department organized Online Alumni Meet on 30<sup>th</sup> December 2021.

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## **Patent File**

- Shishir Dixit, Published patent in **Intellectual Property, India in the Innovation on System and Method for Criminal Detection and Recognition**, Application Number 202011044583, Publication date 29-10-2021.
- Shishir Dixit, Published **Australian Patent** in Intellectual Property, Australian Government in the Innovation on **System and Method for Secured Irrigation**, **Application** Number **2021106933**, **Applied date 24-08-2021**, Publication Date 08-12-2021.
- Shishir Dixit, Published patent in Intellectual Property, India Method and System for Automatically identifying a Blood Donor in Vicinity of a patient Application Number 202121053094 Publication date 03-12-2021.

## **Publications**

## EED, MITS Gwalior publications in renowned Journals and Conferences. Details of these are as follows:

- 1. Shishir Dixit, "DC Side Controllers for Grid Connected Hybrid Renewable Energy Sources" presented in the "2nd IEEE International Conference on Electrical Power and Energy Systems (ICEPES-2021)". Organized the Department of Electrical Engineering, Maulana Azad National Institute of Technology, Bhopal, and the Department of Electrical and Instrumentation Engineering, Sant Longowal Institute of Engineering and Technology (SLIET), Longowal (conference is Technically sponsored by IEEE Bombay Section and Financially sponsored by IEEE MP Section) during December 10 11, 2021.
- 2. Shishir Dixit "AC Side Controller for Grid Connected Hybrid Renewable Energy Sources" presented in the "Second IEEE International Conference on Smart Technologies for Power, Energy and Control (STPEC 2021)" organized at CEC, Bilaspur held during December19 22, 2021.
- 3. Vishal Chaudhary, Manjaree Pandit, Hari Mohan Dubey, "Renewable Energy Integrated Economic Dispatch using Intelligent Techniques: An overview" presented in Third International Conference on Sustainable and Innovative Solutions for Current Challenges in Engineering & Technology "ICSISCET 2021" (Technically Sponsored by Soft Computing Research Society) & MITS Gwalior during 13-14 November 2021 via online mode (on WebEx platform).
- 4. Aman Kashyap, Manjaree Pandit, Lillie Dewan and Vikram Saini, "Sparse Optimization of Output Error Model using Genetic Algorithm" presented in Third International Conference on Sustainable and Innovative Solutions for Current Challenges in Engineering & Technology "ICSISCET 2021" (Technically Sponsored by Soft Computing Research Society) & MITS Gwalior during 13-14 November 2021 via online mode (on WebEx platform).
- 5. Praveen Bansal., Singh, A. Nonlinear adaptive normalized Huber control algorithm for 5-level distribution static compensator. Electr Eng (2021). https://doi.org/10.1007/s00202-021-01424-0

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- Praveen Bansal, Singh,A "Closed Loop Control Using RSAPS Algorithm for 5-Level CHB Multilevel Inverter". International Journal of Control and Automation, Springer (2021) (Accepted for publication)
- 7. Nikhil Paliwal, Laxmi Srivastava, and Manjaree Pandit, "Performance Evaluation of Sine Cosine Algorithm Based Controllers for LFC in an Isolated Hydro Power System Integrated with Energy Storage System", presented in 3<sup>rd</sup> International Conference on Sustainable and Innovative Solutions for Current Challenges in Engineering & Technology (ICSISCET 2021), Organized by Madhav Institute of Technology & Science, Gwalior, India, Technically Sponsored by Soft Computing Research Society, November 13-14, 2021.
- 8. Poonam Singh, Manjaree Pandit and Laxmi Srivastava, "Optimal sizing of stand-alone hybrid energy system using black widow optimization technique", presented in 3rd International Conference on Sustainable and Innovative Solutions for Current Challenges in Engineering & Technology (ICSISCET 2021), Organized by Madhav Institute of Technology & Science, Gwalior, India, Technically Sponsored by Soft Computing Research Society, November 13-14, 2021.
- 9. Vimal Tiwari, Hari Mohan Dubey and Manjaree Pandit, "Optimal Planning of Renewable Based Micro-Grid using Bald Eagle Search Algorithm", presented in 3rd International Conference on Sustainable and Innovative Solutions for Current Challenges in Engineering & Technology (ICSISCET 2021), Organized by Madhav Institute of Technology & Science, Gwalior, India, Technically Sponsored by Soft Computing Research Society, November 13-14, 2021.
- 10. Sunita Shukla and Manjaree Pandit, "An Overview of Recent Nature Inspired Computational Techniques for Dynamic Economic Dispatch", presented in 3rd International Conference on Sustainable and Innovative Solutions for Current Challenges in Engineering & Technology (ICSISCET 2021), Organized by Madhav Institute of Technology & Science, Gwalior, India, Technically Sponsored by Soft Computing Research Society, November 13-14, 2021.
- 11. Designing an optimum and reduced order filter for efficient ECG-QRS peak detection and classification of arrhythmia data, Hemant Amhia and Arun Kumar Wadhwani, Hindawi, Journal of healthcare Engineering, Volume 2021, Article ID6542290, pp1-17, (https://doi.org/10.1155/2021/6542290.
- 12. Automated Identification of Tachyarrhythmia from Different Datasets of Heart Rate Variability using a Hybrid Deep Learning Model Manoj Kumar Ojha, S.Wadhwani, A.K. Wadhwani and A Shukla, International Conference on Computational Intelligence, 27-28 Dec 2021, IIIT Pune. (Best Paper award in track on Machine Learning)
- 13. Rajni Maurya and Sulochana Wadhwani "Brain MR Image Preprocessing & Tumor Segmentation using Morphology & Watershed Algorithm", presented in 3<sup>rd</sup> International Conference on Sustainable and Innovative Solutions for Current Challenges in Engineering & Technology (ICSISCET 2021), Organized by Madhav Institute of Technology & Science,

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- Gwalior, India, Technically Sponsored by Soft Computing Research Society, November 13-14, 2021.
- 14. Rajni Maurya and Sulochana Wadhwani, "Morphology Based Brain Tumor Identification and Segmentation in MR Images", presented in 3rd IEEE Bombay Section Signature International Conference (IBSSC-2021), organized by IEEE Bombay Section and ABV-IIITM Gwalior, India, 18-20 November 2021.
- 15. Rinisha Bagaria, Sulochana Wadhwani and A K Wadhwani "Bone Fracture Detection in X-Ray Images Using Convolution Neural Network", presented in 3rd International Conference on Sustainable and Innovative Solutions for Current Challenges in Engineering & Technology (ICSISCET 2021), Organized by Madhav Institute of Technology & Science, Gwalior, India, Technically Sponsored by Soft Computing Research Society, November 13-14, 2021.

## **Student Participations & Achievements**

## First Year (EED):

- Five students (2 from EE & 3 from EE-IoT) participated in various sports, technical & cultural events in MITS Gwalior.
- Out of these, two students, Ankit Singh Tomar & Devansh tiwari were part of runner-up teams of cricket & basketball respectively.

## **Second Year (EED):**

- A total of eighteen students from second year of EE & EE-IoT participated in 37 different activities including sports, technical events, art & cultural events held inside the MITS Gwalior.
- Abhishek Kori secured 3<sup>rd</sup> prize in poster making competition.
- Yashika Agrawal received certificate of appreciation for successful conduction of Alumni-E-Conclave on 10<sup>th</sup> of October 2021.
- Eleven students participated in various activities like online workshops, skill developing courses, technical events outside the institute.

## Third Year (EED):

- Seven students from third year participated in various cultural, sports, technical & nontechnical events held in offline & online mode like online workshops & online Zumba Master Classes at MITS Gwalior.
- Mudit Sharma was nodal runner up & state level winner from MITS basketball team.
- Six students of EED third year participated in eight activities outside MITS Gwalior. These
  included technical events, online skill development courses, NCC activities & other sport
  events.

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• Ikshita Trivedi secured third position in Nodal level Air Rifle and Pistol shooting competition held at IPS College of Technology and Management Gwalior.

## Final Year (EED):

- Four students from final year, EED participated in various sports, online technical events and career guidance related sessions within & outside MITS Gwalior.
- Mahesh Shivhare got third prize in 100 metre relay race competition in RGPV state athletics championship.

## Any other point

## PhD. Awarded:

• Ms. Shalini Sahay, "Computer Aided Interpretation of Bioelectric Signals" from RGPV, Bhopal Notification No: RGPV/PhD/77/810, dated: 29.11.2021., Supervisors: Dr. A. Wadhwani, Dr. Sarita Singh Bhadoria, Dr. Sulochana Wadhwani

## Glimpse

1. Alumni e-Conclave, on 10th October 2021.



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# Madhav Institute of Technology & Science, Gwalior

Electrical Engineering Department Alumni Interaction



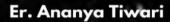
# 10.10.2021

- No REGISTRATION FEES
- E-Certificate Provided

Live on Youtube

gineering Department, MITS Gwalior cordially invites the following alumni to deliver guidance Electrical through this e-conclave. Their achievements are:

Er. Arpit Srivastava (IES)





- Pass out Batch: 2014 (Gold Medalist)
- GATE AIR: 07
- ▶ IES AIR: 37
- Qualified UGC NET in **Engineering Discipline**



- Pass out Batch:2015
- PhD(P), IISC Bangalore
- MTech: IIT Indore

Er. Chintan Gupta



- Pass out Batch: 2018
- MBA(P), XLRI, Jamshedpur



- Er. Nupur Bhardwaj
  - Pass out Batch: 2020
  - Quality Engineer-Larsen & Toubro Infotech Ltd

The objective of this e-Conclave:

- . To spread awareness and preparation of GATE, MBA and **IES Examination**
- . To aware the scope of research in current scenaria.
- . How to become industry ready IT Professionals.

- Faculty coordinators:-• Dr.Vijay Bhuria Prof.Praveen
- Bansal
- Prof. Vishal Chaudhary



Regestration Link:-

https://forms.gle/UtMHxtedkrMdiTEW7

For Any Queries, Contact Sarika Marpe:- 9340345925 Abhishek Maneshwar:- 9111646696

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## 2. CLEANLINESS PROGRAM AND CAMPAIGN on 2nd October 2021









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एमआइटीएस में इलेक्ट्रिकल इंजीनियरिंग विभाग एवं होलिस्टिक हेल्थ क्लब, रोट्रेक्ट क्लब ऑफ ग्वालियर रीगल के संयुक्त तत्वावधान में सम्मान समारोह एवं स्वच्छता अभियान चलाया गया, जिसमे संस्थान के सचिव रमेश अग्रवाल, संस्थान के डायरेक्टर आरके पण्डित, डीन अकैडिमक डॉ मंजिरी पण्डित, प्रो विशाल चौधरी उपस्थित रहे।

# एमआइटीएस में मनाया स्वच्छता पर्व, कर्मचारियों का किया सम्मान

ग्वालियर (नप्र)। गांधी जयंती के अवसर पर एमआइटीएस में इलेक्ट्रिकल इंजीनियरिंग विभाग, होलिस्टिक हेल्थ क्लब एमआइटीएस और रोटेक्ट क्लब ऑफग्वालियर रीगलके संयुक्त तत्वावधान में संस्थान के समस्त कर्मचारियों का सम्मान किया गया। साथ ही संस्थान में स्वच्छता अभियान चलाया गया। जिसमें संस्थान के सचिव व पूर्व विधायक रमेश अग्रवाल. संस्थान के डायरेक्टर आरके पंडित. डीन अकेडिंग्क डा. मंजिरी पंडित, क्लब के फैकल्टी कोऑर्डिनेटर प्रो. विशाल चौधरी. रोटरी अंतरराष्ट्रीय के डिस्टिक्ट सेक्नेटरी महेंद्र शर्मा, आइपीडीआरआर अखिलेश पटेरिया, संस्थान के एलुमनाई व पूर्व अध्यक्ष अविनाश जैन, होलिस्टिक हेल्थ क्लब के अध्यक्ष आदित्य सिहरे. रोटेक्ट क्लब की अध्यक्ष प्रीति भट्ट, सचिव श्रद्धा शिंदे उपस्थित रहे।

# रोटरेक्ट क्लब व M.I.T.S होलेस्टिक हेल्थ क्लब ने गांधी जंयती के उपलक्ष में सफाई अभियान चलाया वा सफाई कर्मचारियों का समान किया

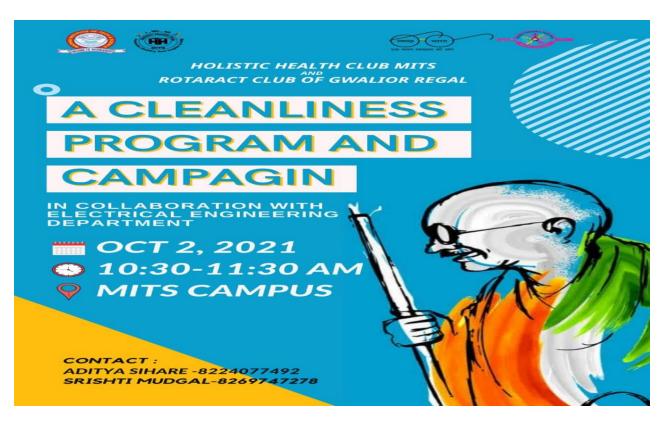
ग्वात्नियर । आज रोटार्क्ट क्लब ऑफ ग्वालियर रीगल द्वारा जयंती गांधी के उपलक्ष M.I.T.S हॉलिस्टिक हेल्थ क्लब के साथ मिलकर mits परिशर में सफाई अभियान चलाया गया। एवं सफाई कर्मचारियों का स्वागत कर पुरुष्कार वितरण किए ,इस मौके पर कांग्रेस के पूर्व विधायक रमेश अग्रवाल जी ने पुष्प अर्जित कर पुरुस्कार वितरण किए वा रोटरी क्लब ऑफ ग्वालियर से रोटेरियन महेंद्र शर्मा जी एवं रोटेरियन अखिलेश पटेरिया द्वारा स्वच्छता के ऊपर संदेश दिया गया एवम हम शहर को किस प्रकार स्वच्छ रख सकते है इसके सुझाव दिए। इस मौके पर अध्यक्ष प्रीति भट्ट उपाध्यक्ष निवेश शर्मा, सचिव शर्द्धा सिंधे, सह सचिव अभिषेक पाठक , अविनाश जैन, उत्कर्ष



पचौरी, विशाल सिंह,रितेंद्र भदोरिया, पूनम सिंह आदि एवम

दोनो क्लब के सभी गणमान्य सदस्य मौजूद रहे।

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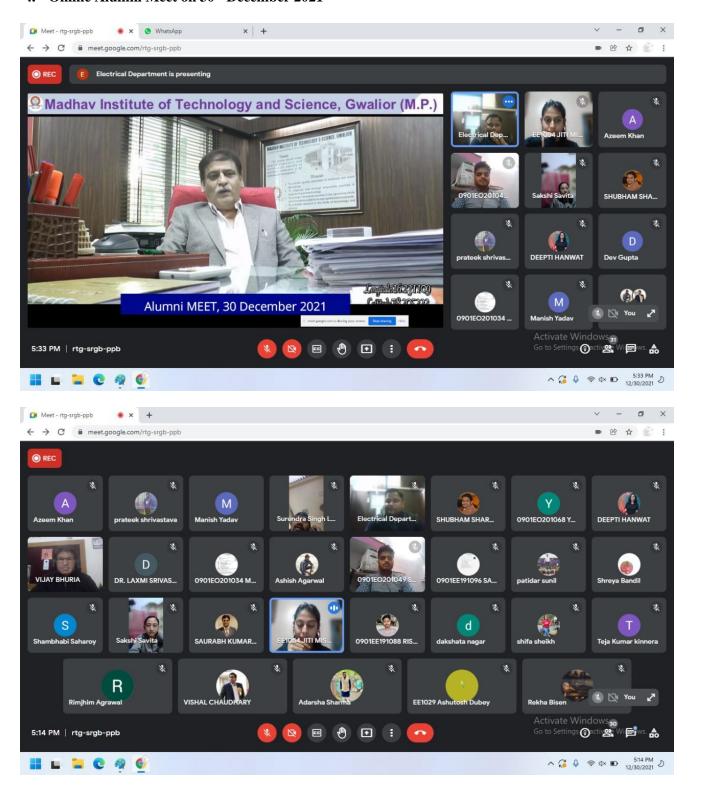


3. Online IPR Awareness program on 17th December 2021



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## 4. Online Alumni Meet on 30th December 2021



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## 5. Student Participations in various activities





Alumni E-Conclave/MITS/EED/2021/21



## CERTIFICATE OF PARTICIPATION

This certificate is awarded to Mrs./Ms. NANDNEE YADAV from Madhav Institute of Technology and Science ,Gwalior on recognition of successful completion of Alumni E-Conclave held under Electrical Engineering Department at Madhav Institute of Technology and Science, Gwalior on 10 October, 2021

Prof. Vishal Chaudhary Prof. Praveen Bansal Faculty Coordinator Faculty Coordinator Faculty Coordinator Professor & Head, EED

**Dr.Vijay Bhuria** 

Dr.Laxmi Srivastava

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## INTERNATIONAL CONFERENCE OF UNDERGRADUATE STUDENTS



## **ICUS 2021**

Organized By Soft Computing Research Society



www.icus21.scrs.in

## **E-CERTIFICATE OF PRESENTATION**

#### **Abhishek Singh**

presented the article titled

# Comparative Study of Speed Control of Brushless DC Motor authored by

## Ikshita Trivedi, Abhishek Singh, Amit Katare, Vikram Saini, Ankit Tiwari

in the International Conference of Undergraduate Students held online during November 27-28, 2021.

CUS 2021/97

Dr. Jagdish Chand Bansal (General Secretary, SCRS)

#### **Partner Institutes**

Indian Institute of Information Technology Pune Madhav Institute of Technology & Science Gwalior BBD Northern India Institute of Technology, Lucknow Rajasthan Institute of Engineering & Technology, Jaipur National Institute of Technology Delhi Christ University, Bangalore Rajkiya Engineering College, Sonbhadra Anand International College of Engineering, Jaipur

RAJIV GANDHI PROUDYOGIKI VISHWAVIDYALAYA, BHOPAL [M.P.] NODAL LEVEL AIR RIFLE & PISTOL SHOOTING COMPETITION (M/F) 2021-2022 Planting Future Organized by IPS College of Technology and Management, Gwalior (M.P.) Certificate This Certificate is awarded to Mr. Ms. IKSWita Trivedi of MITS in recognition as a Player/Official in Nodal Level Air Rifle & Pistol Shooting Competition (M/F) 2021 held at IPS COLLEGE OF TECHNOLOGY AND MANAGEMENT, GWALIOR (M.P.) on 24 December 2021 and secured position. Dr. Arun Kumar Tyagi Mr. Vinay Kumar Yadav Dr. Andrag Garg Principal, IPS-CTM Director, IPS-GOC Organizing Secretary

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## भारतीय सुदूर संवेदन संस्थान/ INDIAN INSTITUTE OF REMOTE SENSING

भारतीय अंतरिक्ष अनुसंधान संगठन/ INDIAN SPACE RESEARCH ORGANISATION अंतरिक्ष विमाग, भारत सरकार/ DEPARTMENT OF SPACE, GOVERNMENT OF INDIA





नामांकन सं./ Enrollment No.: 202110121161428

आई.आई.आर.एस. आउटरीच कार्यक्रम IIRS Outreach Programme

#### कार्यशाला मे सहभागिता का प्रमाणपत्र/CERTIFICATE OF PARTICIPATION IN WORKSHOP

यह प्रमाणित किया जाता है कि MR. SAKSHAM SINGH ने इस संस्थान द्वारा दिनांक 27 अक्टूबर, 2021 को आयोजित एक दिवसीय ऑनलाइन कार्यशाला, इनलैंड जलनिकायों के लिए सैटेलाइट अल्टीमेट्री का अनुप्रयोग में भाग लिया।

(संबन्धित आई.आई.आर.एस नोडल केंद्र- माधव प्रौद्योगिकी एवं विज्ञान संस्थान )।

This is to certify that MR. SAKSHAM SINGH has participated in one day online workshop titled Applications of Satellite Altimetry for Inland Waterbodies, conducted by this institute on 27-10-2021.

(Concerned IIRS Nodal Centre- Madhav Institute of Technology & Science) .

Adityakana

Date: 11-11-2021 Place: Dehradun समन्वयक, विश्वविद्यालय/ संस्थान Coordinator, University/ Institution निदेशक/ Director आई०आई०आर०एस, देहरादून/ IIRS, Dehradun

franciation

ID: 50f1c1a9b05fe0b5975584f2919453a5 .This Certificate can be validated using URL- https://certificate.iirs.gov.ii





# Certificate of Participation

This certificate is awarded to

### ABHISHEK ARYA

for successful completion of "On-Line Course on Indian Constitution" conducted by Nalsar University of Law and sponsored by the Department of Legal Affairs, Ministry of Law & Justice, Government of India, New Delhi.

**Anoop Kumar Mendiratta**Law Secretary
Department of Legal Affairs

Prof. (Dr.) Faizan Mustafa Vice-Chancellor, NALSAR

## **TEAM NEWSLETTER**

**Advisor** – Dr. S. Wadhwani

Member - Prof. Kuldeep Kumar Swarnkar

Prof. Vishal Chaurdhary Prof. Rahul Sagwal

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